REMARKS

Claims 13-25 are pending in the application with claim 13 being the sole independent claim. Claim 26, directed to a non-elected invention in the restriction election filed June 6, 2007, has been cancelled. Claims 13-15 and 17-21 have been amended. The claims have been amended to replace the phrase "the CD40 receptor" with the phrase "CD40". Support for this amendment is provided in the specification at page 1, line 22. Claims 17 and 20 have been amended to replace the term "deimmunized" with the phrase "is such that the T and B cell epitopes have been eliminated". Support for this phrase is provided in the specification at page 13, lines 14-15. Claim 18 has been amended to state "said fragment is used to produce a chimeric antibody, said chimeric antibody being able to stimulate CD40". Claim 21 has also been amended in view of this amendment to claim 18. Support for these amendments are provided in the specification at page 13, lines 17-21.

No new matter has been added.

ARGUMENTS

The Office Action raises several questions regarding the priority date of the present application. Applicants respectfully request that the issue of priority be deferred until a later time.

Claims 13-17, 19, 20, 22-23 and 25 are rejected under 35 U.S.C. §112, second paragraph. The claims have been amended in response thereto to recite "CD40". Applicants traverse the position that claims 13, 15, 17, and 19 comprise the expression "fragments thereof", but rather, these claims are concerned with "fragment thereof which stimulates CD40". It is Applicants' position that this expression read in its entirety is sufficiently clear to one having ordinary skill in the art to indicate that each fragment of an antibody that would still stimulate CD40 is encompassed in the above-identified claims. Additionally, the Office Action objects to the trademark or trade name DEIMMUNIZED in claims 17 and 20. Accordingly, "deimmunized" has been deleted from these claims and replaced with the phrase "is such that the T and B cell epitopes have been eliminated" as is defined in the specification at page 13, lines 14-15.

Accordingly, in view of the amendments to the claims and for the reasons set forth above, it is respectfully requested that the rejection of claims 13-17, 19, 20, 22-23 and 25 under 35 U.S.C. §112, second paragraph, be withdrawn.

Claims 13-25 are rejected under 35 U.S.C. §112, first paragraph. In particular, the Examiner suggests on page 7 of the Office Action that the recitation of "CD40 receptor" be limited to CD40L or CD40 ligand. Applicants respectfully traverse this requirement. It is Applicants' position that one having ordinary skill in the art recognizes that CD40 is a receptor and CD40 ligand is a ligand of this receptor (see Siegall, for example). Accordingly, claims 13-15 and 17 have been amended to replace "CD40 receptor" with "CD40". Similar wording is present in the application, for example at page 1, line 22.

Claims 18, 21, and 24 are rejected under 35 U.S.C. §112, first paragraph, as failing to provide an enabling disclosure for V_H, V_L, and Fd fragments broadly encompassed by the claimed invention. In response thereto, claim 18 has been amended to state "said fragment is used to produce a chimeric antibody, said chimeric antibody being able to stimulate CD40". Claim 21 has also been amended in view of this amendment to claim 18. Support for these amendments are provided in the specification at page 13, lines 17-21.

Accordingly, for the reasons set forth above and in view of the amendments to the claims, it is respectfully requested that the rejection of claims 13-25 under 35 U.S.C. §112, first paragraph, be withdrawn.

Claims 13-25 are rejected under 35 U.S.C. §102(b) as being anticipated by WO 99/61065 to Melief et al (hereinafter referred to as "Melief"). It is the Examiner's position that Melief teach each and every feature of the claimed invention. Applicants respectfully traverse this rejection for the following reasons.

Melief is concerned with the administration of an anti-CD40 antibody and a CTL-activating peptide. The administration of both components does not need to be realized simultaneously. Sequential administration is also encompassed by Melief. The Examiner referred to this embodiment of Melief to conclude that Melief also discloses the use of an anti-CD40 alone in the treatment. Applicants disagree. The fact that both components are not administered together at the same time (i.e., sequentially) does not change the fact that both components still need to be administered to achieve the desired therapeutic effect. The Examiner's attention is directed to the first paragraph of page 5 of the Melief reference which states "*In vivo* triggering of CD40 can markedly enhance the efficacy of peptide-based anti-

tumor vaccines". This statement clearly shows that Melief teaches that both components are needed. Accordingly, Melief does not disclose the use of an anti-CD40 antibody alone for inducing a systemic T cell immunity to exert an anti-tumor response.

Accordingly, for the reasons set forth above, it is respectfully requested that the rejection of claims 13-25 under 35 U.S.C. §102(b) be withdrawn as Melief fails to teach each and every feature of the claimed invention.

Claims 13-25 are rejected under 35 U.S.C. §102(b) as being anticipated by US Publication 2004/0235074 to Siegall et al. (hereinafter referred to as "Siegall"). It is the Examiner's position that Siegall teaches each and every feature of the claimed invention.

The Examiner acknowledges that the Siegall reference does not teach tumor-specific antigens, but alleges that such would be inherent in view of the malignancies set forth in Table 1 on pages 12-13 of the reference. The Examiner also acknowledges that the Siegall reference is silent about the induction of "systemic T cell immunity against an antigen of the tumor... wherein the treatment does not comprise immunization with an antigen of the tumor", per se. However, the Examiner asserts that it does not appear that the claim language or limitations result in a manipulative difference in the method steps when compared to the prior art disclosure. The Examiner further asserts that the fact that Applicants may have discovered yet another beneficial effect from the method set forth in the cited references does not mean that Applicants are entitled to receive a patent on that method.

Applicants respectfully traverse this rejection for the following reasons. Siegall shows that the use of a specific anti-CD40 antibody seems to induce B cell proliferation *in vitro* in peripheral B cells expressing CD40 (example 7.2.2). However, this example only shows that this specific antibody is able to stimulate B cells *in vitro*.

Siegall further shows that growth reduction of a human tumor is induced in a SCID mouse model using the same human anti CD40 antibody (example 8). One having ordinary skill in the art is aware that an SCID mouse does not have any T and B cells. Since the anti CD40 antibody used is a human antibody, it can only induce a growth reduction of the tumor by binding a human CD40 molecule expressed on the tumor itself. Therefore, this experiment shown in Siegall does not demonstrate any *in vivo* activation of T or B cells to exert an anti-tumor effect. Accordingly, Siegall fails to disclose that a systemic T cell immunity can be induced *in vivo* by an anti-CD40 antibody to exert an anti-tumor, let alone an anti-infectious effect.

For the reasons set forth above, it is respectfully requested that the rejection of claims 13-25 under 35 U.S.C. §102(b) be withdrawn as Siegall fails to teach each and every feature of the claimed invention.

Claims 13-25 are rejected under 35 U.S.C. §103(a) as being obvious over the teachings of Siegall in view of Melief. With respect to this combination of references, the Examiner merely states that from the teachings of the references, it was apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention and therefore, the invention as a whole was *prima facia* obvious to one of ordinary skill in the art, as evidenced by the references, especially in the absence of evidence to the contrary.

Applicants respectfully request clarification of this rejection. The Office Action fails to cite any motivation for the combination of Siegall with Melief. The Office Action also fails to state why such a combination would hypothetically disclose the present invention.

In any event, Applicants traverse this rejection for the following reasons. With respect to Siegall, one having ordinary skill in the art would not have been motivated to use an anti-CD40 antibody to induce a systemic T cell immunity to obtain an anti-tumor response *in vivo*. As discussed in detail above, Siegall only shows an *in vitro* induced-proliferation of B cells using such an antibody. There is no indication in Siegall that this antibody could be used to induce either an anti-tumor T cell response or an anti-tumor B cell response *in vivo*. Furthermore, one having ordinary skill in the art knows that when a B cell response is induced, it does not necessarily mean that "inherently" a T cell response will also be induced. On the contrary, T and B cells are each induced by a distinct mechanism. Therefore, the existence of an activation of B cells *in vitro* might even be seen as teaching away from the present invention.

Furthermore, one having ordinary skill in the art would not be motivated to combine Siegall with Melief as Melief teaches away from this combination. In particular, as noted above, Melief teaches that a peptide is needed in addition to an anti-CD40 antibody. Accordingly, even if such a combination of references is valid, one would not arrive at the present invention because Melief specifically teaches the use of the anit-CD40 antibody with a peptide.

Accordingly, for the reasons set forth above, it is respectfully requested that the rejection of claims 13-25 under 35 U.S.C. §103(a) be withdrawn as the combination of Siegall with Melief fails to render these claims obvious.

CONCLUSION

Based on the foregoing remarks, reconsideration of the rejection and allowance of pending claims 13-25 are respectfully requested.

Respectfully submitted,

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